

GEARTECH	CHECKLIST			No. CK4300	SHEET 1 OF 2
				Rev. A	
Shaft Design Audit				BY RLE	DATE 9/27/99
				CKD JRM	DATE 9/27/99
SHAFT DATA					
Question	Y	N	R	Comments	
Do drawings specify the following data?					
Shaft dimensions?					
Shaft material?					
Shaft hardness?					
Are the following geometric tolerances specified?					
Diameters?					
Lengths?					
Surface roughness?					
Straightness?					
Circularity?					
Parallelism?					
Radial and axial runout?					
Do fillets clear mating components and minimize stress concentrations?					
Are keys fitted with an interference fit?					
Are keyways designed to minimize stress concentrations?					
Do inside corners of keyways have adequate fillet radii?					
Are edges of keyways deburred or chamfered?					
Do keyways not extend into bearing journals?					
Is shaft material an alloy steel with sufficient hardenability to meet requirements of AGMA/AWEA 921-A97 and procurement specification?					
ASSEMBLY					
Question	Y	N	R	Comments	
Has gearbox assembly been reviewed to assess risk of damage to shaft?					
Are shaft-to-inner race fits tight?					
If necessary, are fixtures for assembly available?					
SHAFT RATING CALCULATIONS					
Question	Y	N	R	Comments	
Have shafts been rated per ANSI/AGMA 6001-D97?					
Is reliability factor $k_c = 0.817$?					
Is fatigue safety factor $F_{sf} \geq 1.1$?					
Is peak load safety factor $F_{sp} \geq 1.1$?					

[illegible]